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» Key

IEEE JNL IEEE Journal or Magazine

IEE JNL IEE Journal or Magazine

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IEEE STD IEEE Standard

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- ☐ 1. **Adapting a downlink array from uplink measurements**
Hochwald, B.M.; Mareta, T.L.;
[Signal Processing, IEEE Transactions on \[see also Acoustics, Speech, and Sig](#)
[IEEE Transactions on\]](#)
Volume 49, Issue 3, March 2001 Page(s):642 - 653
Digital Object Identifier 10.1109/78.905894
[AbstractPlus](#) | [References](#) | Full Text: [PDF](#)(228 KB) IEEE JNL
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- ☐ 2. **Effects of precipitation on 15.3- and 31.65-GHz earth—Space transmissio**
V satellite
Ippolito, L.J.;
[Proceedings of the IEEE](#)
Volume 59, Issue 2, Feb. 1971 Page(s):189 - 205
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- ☐ 3. **A novel millimeter-wave-band radio-over-fiber system with dense wavele**
multiplexing bus architecture
Xiupu Zhang; Baozhu Liu; Jianping Yao; Ke Wu; Kashyap, R.;
[Microwave Theory and Techniques, IEEE Transactions on](#)
Volume 54, Issue 2, Part 2, Feb. 2006 Page(s):929 - 937
Digital Object Identifier 10.1109/TMTT.2005.863045
[AbstractPlus](#) | Full Text: [PDF](#)(416 KB) IEEE JNL
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- ☐ 4. **Remote downconversion with wavelength reuse for the radio/fiber uplink**
Kaszubowska, A.; Hu, L.; Barry, L.P.;
[Photonics Technology Letters, IEEE](#)
Volume 18, Issue 4, Feb. 15, 2006 Page(s):562 - 564
Digital Object Identifier 10.1109/LPT.2005.863995
[AbstractPlus](#) | Full Text: [PDF](#)(128 KB) IEEE JNL
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- ☐ 5. **Extending optical transmission distance in fiber wireless links using pas**
conjunction with optimized modulation
Attygalle, M.; Lim, C.; Nirmalathas, A.;
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- ☐ 6. **OCDMA over WDM PON-solution path to gigabit-symmetric FTTH**
Kitayama, K.; Xu Wang; Naoya Wada;
[Lightwave Technology, Journal of](#)
Volume 24, Issue 4, April 2006 Page(s):1654 - 1662
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- ☐ 7. **EA-transceiver for full-duplex WDM ring networks**
Stohr, A.; Heinzlmann, R.; Kitayama, K.; Jager, D.;
[Signals, Systems, and Electronics, 1998. ISSSE 98. 1998 URSI International S](#)
29 Sept.-2 Oct. 1998 Page(s):384 - 387
Digital Object Identifier 10.1109/ISSSE.1998.738102
[AbstractPlus](#) | Full Text: [PDF](#)(288 KB) IEEE CNF
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- ☐ 8. **Long-term statistics of laser beam propagation in an optical ground-to-ground satellite communications link**
Toyoshima, M.; Yamakawa, S.; Yamawaki, T.; Arai, K.; Garcia-Talavera, M.R.;
Sodnik, Z.; Demelenne, B.;
[Antennas and Propagation, IEEE Transactions on](#)
Volume 53, Issue 2, Feb 2005 Page(s):842 - 850
Digital Object Identifier 10.1109/TAP.2004.841329
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- ☐ 9. **The Autonomous Data Optical Relay Experiment: first two way laser communication between an aircraft and submarine**
Puschell, J.J.; Giannaris, R.J.; Stotts, L.;
[Telesystems Conference, 1992. NTC-92., National](#)
19-20 May 1992 Page(s):14/27 - 14/30
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- ☐ 10. **A Full-duplex WDM Millimeter-Wave-Band Radio-on-Fiber System Using a Supercontinuum Light Source**
Toda, H.; Nakasyotani, T.; Kuri, T.; Kitayama, K.;
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12-14 Oct. 2005 Page(s):111 - 114
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- ☐ 11. **Self-amplified transceivers for local-access star networks**
Feuer, M.D.; Feldman, R.D.; Zyskind, J.L.; Wood, T.H.; Sulhoff, J.; Lion, K.-Y.;
[Photonics Technology Letters, IEEE](#)
Volume 7, Issue 9, Sept. 1995 Page(s):1063 - 1065
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- ☐ 12. **Transmission of 37.6-GHz QPSK Wireless Data Over 12.8-km Fiber With a Millimeter-Wave Local Oscillator Delivery Using a Bi-Directional SOA in a System With 2.2-km CWDM Fiber Ring Architecture**

Ismail, T.; Liu, C.P.; Mitchell, J.E.; Seeds, A.J.; Qian, X.; Wonfor, A.; Penty, R.
Photonics Technology Letters, IEEE
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- ☐ 13. **Simultaneous electrooptical up/downconversion, remote oscillator generation, transmission of multiple optical WDM channels for a 60-GHz high-capacity**
Kojucharow, K.; Sauer, M.; Kaluzni, H.; Sommer, D.; Poegel, F.; Nowak, W.; F
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☐ 14. **Radio-on-fiber techniques using two-mode injection-locked lasers for broadband millimeter-wave communications**
Hu, W.W.; Inagaki, K.; Ohira, T.;
[Microwave and Millimeter Wave Technology, 2002. Proceedings. ICMMT 2002](#)
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☐ 15. **SOA-EAM frequency up/down-converters for 60-GHz bi-directional radio**
Jun-Hyuk Seo; Chang-Soon Choi; Young-Shik Kang; Yong-Duck Chung; Jeha
Choi;
[Microwave Theory and Techniques, IEEE Transactions on](#)
Volume 54, Issue 2, Part 2, Feb. 2006 Page(s):959 - 966
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☐ 16. **A physical model for wireless channels to provide insights for long range**
Hallen, H.; Duel-Hallen, A.; Shengquan Hu; Tung-Shen Yang; Ming Lei;
[MILCOM 2002. Proceedings](#)
Volume 1, 7-10 Oct. 2002 Page(s):627 - 631 vol.1
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|-------|------|------------------------------------|---|------------------|---------|------------------|
| L1 | 1164 | 455/63.1.ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L2 | 144 | 455/63.4.ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L3 | 504 | 455/428.ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L4 | 1302 | 455/562.1.ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
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| L7 | 504 | 455/428.ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L8 | 1302 | 455/562.1.ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L9 | 1048 | (L5 OR L6 OR L7 OR L8) AND beam | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |

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| L10 | 526 | (L5 OR L6 OR L7 OR L8) AND beam AND (downlink OR (down ADJ link)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L11 | 505 | (L5 OR L6 OR L7 OR L8) AND beam AND (downlink OR (down ADJ link)) AND antenna | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L12 | 359 | (L5 OR L6 OR L7 OR L8) AND beam AND (downlink OR (down ADJ link)) AND (antenna NEAR5 array) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L13 | 315 | (L5 OR L6 OR L7 OR L8) AND beam AND (downlink OR (down ADJ link)) AND (antenna NEAR5 array) AND (base ADJ station) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L14 | 170 | (L5 OR L6 OR L7 OR L8) AND (beam WITH (downlink OR (down ADJ link))) AND (antenna NEAR5 array) AND (base ADJ station) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L15 | 61 | (L5 OR L6 OR L7 OR L8) AND (beam WITH (downlink OR (down ADJ link))) AND (antenna NEAR5 array) AND (base ADJ station) AND null | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L16 | 1904 | arcsin | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L17 | 55 | arcsin WITH wavelength | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L18 | 134 | arcsin SAME wavelength | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L19 | 90 | arcsin WITH lambda | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |

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| L20 | 23 | arcsin WITH lambda WITH (theta OR phi) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L21 | 30 | (bad ADJ null) OR (pseudo ADJ null) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L22 | 149 | (false OR fake OR unwanted) ADJ null | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L23 | 38 | (good ADJ null) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L24 | 1864 | downlink ADJ3 frequency | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L25 | 1053 | (downlink ADJ3 frequency) WITH (uplink ADJ3 frequency) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L26 | 5457 | null NEAR3 (mov\$4 OR reset\$4 OR steer\$4 OR shift\$4 OR plac\$4) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L27 | 208 | null NEAR3 (mov\$4 OR reset\$4 OR steer\$4 OR shift\$4 OR plac\$4) NEAR3 (zero OR "0") | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L28 | 3660 | (mov\$4 OR reset\$4 OR steer\$4 OR shift\$4 OR plac\$4) ADJ3 null | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L29 | 70 | (mov\$4 OR reset\$4 OR steer\$4 OR shift\$4 OR plac\$4) ADJ3 null ADJ3 (zero OR "0") | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |

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| L30 | 128 | (mov\$4 OR reset\$4 OR steer\$4 OR shift\$4 OR plac\$4) ADJ5 null ADJ5 (zero OR "0") | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L31 | 4 | (mov\$4 OR reset\$4 OR steer\$4 OR shift\$4 OR plac\$4) ADJ5 null ADJ5 ((zero OR "0") ADJ degrees) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L32 | 128 | (mov\$4 OR reset\$4 OR steer\$4 OR shift\$4 OR plac\$4 OR redirect) ADJ5 null ADJ5 (zero OR "0") | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L33 | 356704 | antenna | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L34 | 45 | antenna AND (null WITH DOA) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L35 | 1827 | antenna AND (null WITH direction) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L36 | 713 | (antenna ADJ array) AND (null WITH direction) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L37 | 264 | (antenna ADJ array) AND (null WITH direction WITH (mov\$4 OR reset\$4 OR steer\$4 OR shift\$4 OR plac\$4)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L38 | 14334 | antenna ADJ array | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L39 | 1248 | (antenna ADJ array) AND ((antenna OR element) ADJ (spacing OR distance OR separation)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |

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| L40 | 406 | (antenna ADJ array) AND (((antenna OR element) ADJ (spacing OR distance OR separation)) WITH wavelength) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L41 | 122 | (antenna ADJ array) AND (((antenna OR element) ADJ (spacing OR distance OR separation)) WITH wavelength WITH half) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L42 | 24 | (antenna ADJ array) AND (((antenna OR element) ADJ (spacing OR distance OR separation)) WITH wavelength WITH quarter) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L43 | 55 | (weight ADJ generator) AND (antenna ADJ array) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L44 | 60 | sum ADJ5 (uplink AND downlink) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L45 | 1 | sum WITH ((uplink AND downlink) NEAR5 wavelength) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L46 | 1164 | 455/63.1.ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L47 | 144 | 455/63.4.ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L48 | 504 | 455/428.ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L49 | 1302 | 455/562.1.ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |

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| L50 | 1164 | 455/63.1.ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L51 | 144 | 455/63.4.ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L52 | 504 | 455/428.ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L53 | 1302 | 455/562.1.ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L54 | 1048 | (L50 OR L51 OR L52 OR L53) AND beam | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L55 | 526 | (L50 OR L51 OR L52 OR L53) AND beam AND (downlink OR (down ADJ link)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L56 | 505 | (L50 OR L51 OR L52 OR L53) AND beam AND (downlink OR (down ADJ link)) AND antenna | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L57 | 359 | (L50 OR L51 OR L52 OR L53) AND beam AND (downlink OR (down ADJ link)) AND (antenna NEAR5 array) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L58 | 315 | (L50 OR L51 OR L52 OR L53) AND beam AND (downlink OR (down ADJ link)) AND (antenna NEAR5 array) AND (base ADJ station) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L59 | 170 | (L50 OR L51 OR L52 OR L53) AND (beam WITH (downlink OR (down ADJ link))) AND (antenna NEAR5 array) AND (base ADJ station) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |

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| L60 | 61 | (L50 OR L51 OR L52 OR L53) AND (beam WITH (downlink OR (down ADJ link))) AND (antenna NEAR5 array) AND (base ADJ station) AND null | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L61 | 1904 | arcsin | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L62 | 55 | arcsin WITH wavelength | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L63 | 134 | arcsin SAME wavelength | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L64 | 90 | arcsin WITH lambda | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L65 | 23 | arcsin WITH lambda WITH (theta OR phi) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L66 | 30 | (bad ADJ null) OR (pseudo ADJ null) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L67 | 149 | (false OR fake OR unwanted) ADJ null | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L68 | 38 | (good ADJ null) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L69 | 1864 | downlink ADJ3 frequency | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |

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| L70 | 1053 | (downlink ADJ3 frequency) WITH (uplink ADJ3 frequency) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L71 | 5457 | null NEAR3 (mov\$4 OR reset\$4 OR steer\$4 OR shift\$4 OR plac\$4) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L72 | 208 | null NEAR3 (mov\$4 OR reset\$4 OR steer\$4 OR shift\$4 OR plac\$4) NEAR3 (zero OR "0") | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L73 | 3660 | (mov\$4 OR reset\$4 OR steer\$4 OR shift\$4 OR plac\$4) ADJ3 null | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L74 | 70 | (mov\$4 OR reset\$4 OR steer\$4 OR shift\$4 OR plac\$4) ADJ3 null ADJ3 (zero OR "0") | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L75 | 128 | (mov\$4 OR reset\$4 OR steer\$4 OR shift\$4 OR plac\$4) ADJ5 null ADJ5 (zero OR "0") | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L76 | 4 | (mov\$4 OR reset\$4 OR steer\$4 OR shift\$4 OR plac\$4) ADJ5 null ADJ5 ((zero OR "0") ADJ degrees) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L77 | 128 | (mov\$4 OR reset\$4 OR steer\$4 OR shift\$4 OR plac\$4 OR redirect) ADJ5 null ADJ5 (zero OR "0") | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L78 | 356704 | antenna | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L79 | 45 | antenna AND (null WITH DOA) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |

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| L80 | 1827 | antenna AND (null WITH direction) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L81 | 713 | (antenna ADJ array) AND (null WITH direction) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L82 | 264 | (antenna ADJ array) AND (null WITH direction WITH (mov\$4 OR reset\$4 OR steer\$4 OR shift\$4 OR plac\$4)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L83 | 14334 | antenna ADJ array | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L84 | 1248 | (antenna ADJ array) AND ((antenna OR element) ADJ (spacing OR distance OR separation)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L85 | 406 | (antenna ADJ array) AND (((antenna OR element) ADJ (spacing OR distance OR separation)) WITH wavelength) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L86 | 122 | (antenna ADJ array) AND (((antenna OR element) ADJ (spacing OR distance OR separation)) WITH wavelength WITH half) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L87 | 24 | (antenna ADJ array) AND (((antenna OR element) ADJ (spacing OR distance OR separation)) WITH wavelength WITH quarter) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L88 | 55 | (weight ADJ generator) AND (antenna ADJ array) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L89 | 60 | sum ADJ5 (uplink AND downlink) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |

EAST Search History

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|------|----|---|---|----|----|------------------|
| L90 | 1 | sum WITH ((uplink AND downlink) NEAR5 wavelength) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L91 | 1 | "6041237".PN. | USPAT; USOCR | OR | ON | 2006/07/10 14:01 |
| L92 | 1 | sum WITH (uplink ADJ wavelength) WITH (downlink ADJ wavelength) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L93 | 1 | sum WITH ((uplink AND downlink) NEAR3 wavelength) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L94 | 1 | averag\$4 WITH ((uplink AND downlink) NEAR5 wavelength) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L95 | 1 | "6041237".PN. | USPAT; USOCR | OR | ON | 2006/07/10 14:01 |
| L96 | 1 | sum WITH (uplink ADJ wavelength) WITH (downlink ADJ wavelength) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L97 | 1 | sum WITH ((uplink AND downlink) NEAR3 wavelength) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L98 | 1 | averag\$4 WITH ((uplink AND downlink) NEAR5 wavelength) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L99 | 36 | (L5 OR L6 OR L7 OR L8) AND (beam WITH (downlink OR (down ADJ link))) AND (antenna NEAR5 array) AND (base ADJ station) AND null AND weight | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L100 | 4 | arcsin WITH wavelength WITH antenna | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |

EAST Search History

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|------|----|--|---|----|----|------------------|
| L101 | 3 | arcsin SAME wavelength SAME (antenna WITH (spacing OR separation OR distance)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L102 | 10 | arcsin SAME wavelength SAME antenna | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L103 | 16 | arcsin WITH lambda WITH theta | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L104 | 7 | L20 NOT L103 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L105 | 5 | bad ADJ null | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L106 | 25 | L21 NOT L105 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L107 | 20 | ((false OR fake OR unwanted) ADJ null) AND antenna | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L108 | 18 | (good ADJ null) AND antenna | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L109 | 32 | (downlink ADJ3 frequency) WITH (uplink ADJ3 frequency) WITH ratio | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L110 | 11 | (downlink ADJ3 frequency) WITH (uplink ADJ3 frequency) WITH ratio WITH phase | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |

EAST Search History

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|------|----|---|---|----|----|------------------|
| L111 | 6 | null NEAR3 (mov\$4 OR reset\$4 OR steer\$4 OR shift\$4 OR plac\$4) NEAR3 ((zero OR "0") ADJ degrees) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L112 | 29 | (null NEAR3 (mov\$4 OR reset\$4 OR steer\$4 OR shift\$4 OR plac\$4) NEAR3 (zero OR "0")) AND antenna | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L113 | 2 | (mov\$4 OR reset\$4 OR steer\$4 OR shift\$4 OR plac\$4) ADJ3 null ADJ3 ((zero OR "0") ADJ degrees) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L114 | 2 | L31 NOT L113 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L115 | 8 | ((mov\$4 OR reset\$4 OR steer\$4 OR shift\$4 OR plac\$4) ADJ5 null ADJ5 (zero OR "0")) WITH (direction OR DOA) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L116 | 43 | (mov\$4 OR reset\$4 OR steer\$4 OR shift\$4 OR plac\$4 OR redirect) ADJ5 null ADJ5 ("0") | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L117 | 3 | ((mov\$4 OR reset\$4 OR steer\$4 OR shift\$4 OR plac\$4 OR redirect) ADJ5 null ADJ5 ("0")) AND antenna | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L118 | 8 | (antenna ADJ array) AND (null WITH direction WITH (mov\$4 OR reset\$4 OR steer\$4 OR shift\$4 OR plac\$4) WITH (zero OR "0")) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L119 | 7 | (antenna ADJ array) AND (((antenna OR element) ADJ (spacing OR distance OR separation)) WITH wavelength WITH half WITH less WITH equal) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L120 | 2 | downlink ADJ weight ADJ generator | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |

EAST Search History

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|------|----|---|---|----|----|------------------|
| L121 | 11 | ((weight ADJ generator) WITH downlink) AND (antenna ADJ array) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L122 | 36 | (L50 OR L51 OR L52 OR L53) AND (beam WITH (downlink OR (down ADJ link))) AND (antenna NEAR5 array) AND (base ADJ station) AND null AND weight | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L123 | 4 | arcsin WITH wavelength WITH antenna | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L124 | 3 | arcsin SAME wavelength SAME (antenna WITH (spacing OR separation OR distance)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L125 | 10 | arcsin SAME wavelength SAME antenna | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L126 | 16 | arcsin WITH lambda WITH theta | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L127 | 7 | L65 NOT L126 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L128 | 5 | bad ADJ null | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L129 | 25 | L66 NOT L128 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L130 | 20 | ((false OR fake OR unwanted) ADJ null) AND antenna | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |

EAST Search History

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|------|----|---|---|----|----|------------------|
| L131 | 18 | (good ADJ null) AND antenna | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L132 | 32 | (downlink ADJ3 frequency) WITH (uplink ADJ3 frequency) WITH ratio | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L133 | 11 | (downlink ADJ3 frequency) WITH (uplink ADJ3 frequency) WITH ratio WITH phase | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L134 | 6 | null NEAR3 (mov\$4 OR reset\$4 OR steer\$4 OR shift\$4 OR plac\$4) NEAR3 ((zero OR "0") ADJ degrees) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L135 | 29 | (null NEAR3 (mov\$4 OR reset\$4 OR steer\$4 OR shift\$4 OR plac\$4) NEAR3 (zero OR "0")) AND antenna | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L136 | 2 | (mov\$4 OR reset\$4 OR steer\$4 OR shift\$4 OR plac\$4) ADJ3 null ADJ3 ((zero OR "0") ADJ degrees) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L137 | 2 | L76 NOT L136 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L138 | 8 | ((mov\$4 OR reset\$4 OR steer\$4 OR shift\$4 OR plac\$4) ADJ5 null ADJ5 (zero OR "0")) WITH (direction OR DOA) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L139 | 43 | (mov\$4 OR reset\$4 OR steer\$4 OR shift\$4 OR plac\$4 OR redirect) ADJ5 null ADJ5 ("0") | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L140 | 3 | ((mov\$4 OR reset\$4 OR steer\$4 OR shift\$4 OR plac\$4 OR redirect) ADJ5 null ADJ5 ("0")) AND antenna | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |

EAST Search History

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|------|--------|---|---|----|----|------------------|
| L141 | 8 | (antenna ADJ array) AND (null WITH direction WITH (mov\$4 OR reset\$4 OR steer\$4 OR shift\$4 OR plac\$4) WITH (zero OR "0")) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L142 | 7 | (antenna ADJ array) AND (((antenna OR element) ADJ (spacing OR distance OR separation)) WITH wavelength WITH half WITH less WITH equal) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L143 | 2 | downlink ADJ weight ADJ generator | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L144 | 11 | ((weight ADJ generator) WITH downlink) AND (antenna ADJ array) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L145 | 1 | 09/922442 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L146 | 379506 | ((antenna or array or element) near5 (spac\$3 or separation or distance or delta)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L147 | 41 | (null near3 wrap\$4) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L148 | 100 | (wavelength near3 uplink) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L149 | 100 | (wavelength near3 downlink) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L150 | 2 | L146 with L148 with L149 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |

EAST Search History

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|------|------|--|---|----|----|------------------|
| L151 | 1644 | (342/368.ccls. or 342/372.ccls. or 342/373.ccls.) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L152 | 282 | (342/368.ccls. or 342/372.ccls. or 342/373.ccls.) and null and beam | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L153 | 11 | (342/368.ccls. or 342/372.ccls. or 342/373.ccls.) and null and beam and (fdd or (frequency adj division adj duplex)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:01 |
| L154 | 4 | downlink with (greater or higher or more or exceed) with wavelength with (spac\$3 or separation or delta) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:51 |
| L155 | 2 | uplink with (less\$2 or lower or below) with wavelength with (spac\$3 or separation or delta) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 14:53 |
| L157 | 4 | (uplink adj null) with (downlink adj null) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 15:43 |
| L158 | 26 | (pseudonull or (pseudo adj null)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 15:56 |
| L159 | 165 | (pseudonull or (pseudo adj null) or (false adj null)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/07/10 15:57 |